Law of the sea and offshore geophysics

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Carving up of the sea floor during the next ten years is unprecedented in man's extension of his dominion over the Earth. At stake is over 75 million square kilometres, equal to more than half the Earth's land surface. It is also unprecedented because the claims are to be based on hydrographic and geological principles and are to be adjudged by a Commission comprised of "experts in the fields of hydrography, geodesy, geophysics, and geology". For the first time in international relations, the last word will not be with the lawyers.

According to the "United Nations Convention on the Law of the Sea" (UNCLOS), "States that believe to have wide continental shelves and a right to sovereign jurisdiction over the ocean floor up to 350 km offshore, can submit their claims to the "Commission on the Limits of the Continental Shelf (CLCS)". These submissions must be made within ten years of a state ratifying the Convention, or by November, 2009 for the states that ratified the Convention before 1999. Canada ratified the Convention on November 6, 2003, so our "date with destiny" is November, 2013.

To make a claim, Canada, and every other coastal state, must document the position of five lines on a chart: i) baseline (coastline); ii) 2500 m isobath; iii) "foot of the slope"; iv) "Gardiner line" (1% sediment thickness); and v) a 350M constraint line. In theory, defining these lines is not "rocket science", but because geology of the continent ocean transition zone is complex, it will require a massive data collection program and prudent judgment to make a successful bid.

The procedures for making a submission are clearly outlined by *CLCS* and our next task is well defined. It is to conduct a "desktop study" (in the *CLCS* parlance) to perform data mining on all the existing geophysical and geological data up to 350 nautical miles offshore to prove that we have grounds for a claim (appurtenance test). This will take several years even if we started yesterday. Then, it will take more years to acquire data to fill in identified gaps and a few more years to put it all together and make a submission. In the meantime the clock is ticking.